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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,621	03/01/2002	David Pratt Remsen	58378.127	7946

7590 09/24/2007  
Glovsky and Popeo, PC  
Chrysler Center  
666 Third Avenue 24th floor  
New York, NY 10017

EXAMINER
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WONG, LESLIE

ART UNIT	PAPER NUMBER
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2164

MAIL DATE	DELIVERY MODE
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09/24/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

### Application No.

10/087,621

### Applicant(s)

REMSEN ET AL.

### Examiner

Leslie Wong

### Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 32,33,38-60 and 62-70 is/are pending in the application.
- 4a) Of the above claim(s) 61 and 71 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 41-59 is/are allowed.
- 6) ☒ Claim(s) 32,33,38,39,60 and 67-70 is/are rejected.
- 7) ☒ Claim(s) 40 and 62-66 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Election/Restrictions***

1. Election was made without traverse of Group I, claims 32-33, 38-60, and 62-70 is acknowledged. Group II, claims 61 and 71, are withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected.

***Claim Rejections - 35 USC § 101***

2. Claims 40 and 62-66 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C 101.

3. Claim 40 is for a system. However, all of the elements claimed could be reasonably interpreted in light of the disclosure by an ordinary artisan as being software alone, and thus is directed to software per se, which is non-statutory.

In order for such a software claim to be statutory, it must be claimed in combination with an appropriate medium and/or hardware to establish a statutory category of invention and enable any functionality to realized.

To expedite a complete examination of the instant application the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in

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anticipation of applicant amending these claims to place them within the four categories of invention.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 32, 33, 38-39, 60, and 67-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Cotter et al.** (hereinafter "Cotter", "The National Biological Information Infrastructure: coming of age", Online Information Review, Volume 24 – Number 6, pp. 429-438, copyright MCB University Press, ISSN: 1468-4527 (2000)) in view of Martin R. **Pullan et al.** (hereinafter "Pullan", "The Prometheus Taxonomic

Model: a practical approach to representing multiple classifications", Taxon 49: 55-75, 2000, ISSN 0040-0262) and **Atman et al.** ("Atman") (US 6442566 B1).

As per claim 32, **Cotter** discloses a method for use in managing taxonomic information, comprising:

identifying a first name that specifies an organism (Cotter, page 432 - 435);

determining that the name is sufficiently similar to a text string of a name (Cotter, page 435, "Conceptually, researchers or cataloguers creating metadata will enter a term that they know, which the system then checks against the controlled vocabulary ...");

identifying a first taxonomic identifier of the name entry (Cotter, page 432 – 435, "For instance, an IT IS check of the scientific name for 'even grosbeak' produces one preferred scientific name and multiple synonyms for the scientific name");

determining that the first taxonomic identifier is included in a classification entry (Cotter, page 432 – 435);

identifying a second taxonomic identifier of the classification entry (Cotter, page 432 – 435); and

based on the second taxonomic identifier, identifying a second name (Cotter, page 432 – 435, synonyms and authorised term).

**Cotter** does not explicitly disclose allowing taxa to be organized according to more than one classification.

**Pullan**, however, teaches allowing taxa to be organized according to more than one classification (Pullan, pages 10-11).

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It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Pullan's** teaching would have allowed **Cotter's** to better organize the data and classify the taxa more flexibly by allowing taxa to be organized according to more than one classification as disclosed by Pullan.

**Cotter and Pullan** do not explicitly teach a names table and a classification table.

**Atman**, however, teaches a names table and a classification table (col. 6, lines 26-31; col. 7, lines 25-34; and 65-67; col. 8, lines 9-13; col. 4, lines 7-12; Figs. 2, 4, and 6).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Atman's** teaching would have allowed **Cotter and Pullan's** facilitate efficient data processing by providing a knowledge base that is both flexible and highly structure as suggested by **Atman** col. 3, lines 65-66.

As per claim 33, Cotter and Pullan teach all the claimed subject matters as discussed in claim 32, and Cotter further teaches based on the first name and the second name, driving a search parameter (Cotter, page 432-435).

Claims 38, 39, 60, and 67 are rejected on grounds corresponding to the reasons given above for claims 32 and 33.

As per claim 68, **Cotter** teaches all the claimed subject matters as discussed in claim 67, and further teaches the objectively derived criteria includes a documented associated between the first name and the second name (Cotter, page 432-435).

As per claim 69, **Cotter** teaches all the claimed subject matters as discussed in claim 68, and further teaches wherein the first name is a scientific name and the second name is a common name (Cotter, page 432-435).

As per claim 70, **Cotter** teaches all the claimed subject matters as discussed in claim 68, and further teaches the first and second names are scientific names and wherein the second name is a factual variant of the first name (Cotter, page 432-435).

***Allowable Subject Matter***

6. Claims 41-59 are allowed.
7. Claims 40 and 62-66 would be allowable if claim 40 is rewritten to correct the 101 issue.
8. Prior art of record fails to teach a combination of elements including a taxon table in which each entry associates a name identifier with a taxon identifier; a reference table in which each entry associates a classification identifier with a taxon that represents the

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root of the classification; and a classification table in which each entry associates a taxon identifier with a classification identifier, a relationship attribute, and a second taxon identifier; based on the name and a database of organism classifications, determining a classification for the organism as recited in independent claims 40 and 41.

These features, together with the other limitations of the independent claims are novel and non-obvious over the prior art of record. The dependent claims 42-59 being definite, enabled by the specification, and further limiting to the independent claim, are also allowable.

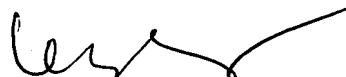
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Wong whose telephone number is (571) 272-4120. The examiner can normally be reached on Monday to Friday 9:30am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHARLES RONES can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Leslie Wong  
Primary Patent Examiner  
Art Unit 2164

LW  
September 17, 2007